

Statistics teaching within UK degree programmes in Medicine and allied health sciences, including through undergraduate and postgraduate entry schemes and intercalation

Note. This particular form is not for inclusion of details of statistical teaching in Masters and PhD programmes.

Institution: Newcastle University

Overview: Most of the statistics teaching here is delivered to postgraduate students. There is no statistics teaching to all MBBS students. The MRes course below is delivered to postgraduates and a minority (~50) of undergraduates in medicine and dentistry taking an intercalated degree.

Medical Sciences MRes: The module *“Research Skills and Principles for the Biosciences”* aims to provide a guide to the use of basic statistics, together with the design of experiments and bioethics. Topics covered include simple descriptive measures, hypothesis tests for continuous data; confidence intervals; sample size methods; regression; correlation; assessment of interactions, adjusting confounding variables; analysis of skewed data; blocking; randomisation; and factorial designs. MINITAB is used for practicals.

Type of students:

Medical X Dental X Biology

Mathematics Other (please state:)

Estimated total number of students: 50

Academic years where medical statistics is taught: As part of 1-year intercalated degree

No. of estimated hours per academic year: 20

Please add fields to the table below, where necessary, to reflect missing subjects. This can easily be achieved by right-clicking in the last row and choosing the option ‘insert’ to insert individual rows. You can in turn copy-paste the content from an existing row and edit the subject name to suit your purposes.

Subject	Concept	Calculations/equations*	Descriptions/comments
Types of variable	X <input type="checkbox"/>	X	
Distributions	X <input type="checkbox"/>	X <input type="checkbox"/>	
Summary Statistics	X <input type="checkbox"/>	<input type="checkbox"/>	
Concepts of population and sample	X <input type="checkbox"/>	X <input type="checkbox"/>	
Confidence intervals	X <input type="checkbox"/>	X <input type="checkbox"/>	
Hypothesis testing, p-values	X <input type="checkbox"/>	X <input type="checkbox"/>	
Comparing two means	X <input type="checkbox"/>	X <input type="checkbox"/>	
Comparing two proportions	X <input type="checkbox"/>	X	
Linear regression	X <input type="checkbox"/>	X <input type="checkbox"/>	
Logistic regression	<input type="checkbox"/>	<input type="checkbox"/>	
Graphs	X <input type="checkbox"/>	X <input type="checkbox"/>	
Survival analysis	<input type="checkbox"/>	<input type="checkbox"/>	
Multivariate analysis	<input type="checkbox"/>	<input type="checkbox"/>	
Critical appraisal	<input type="checkbox"/>	<input type="checkbox"/>	
Other (please state)	<input type="checkbox"/>	<input type="checkbox"/>	
Other (please state)	<input type="checkbox"/>	<input type="checkbox"/>	
Other (please state)	<input type="checkbox"/>	<input type="checkbox"/>	

*If applicable.

Assessment details: **Multiple choice exam – where students are given several results / baseline tables from real publications and the questions test their interpretation and understanding of the results**

Computer package used:

Stata SPSS StatsDirect S-plus R

NCSS Matlab Other , please state which: MINITAB

Recommended literature : None

Contact - administration

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Contact - tutors

Name	Department	Email	Address	Telephone Number

Other comments:

Information last up to date: 01/08/2019

Please return to Margaret MacDougall at Margaret.MacDougall@ed.ac.uk